State of Hawaii DEPARTMENT OF LAND AND NATURAL RESOURCES Division of Aquatic Resources Honolulu, Hawaii 96813

March 24, 2006

Board of Land and Natural Resources Honolulu, Hawaii

REQUEST FOR APPROVAL TO AMEND/EXTEND EIGHT (8) PROJECT AGREEMENTS WITH THE RESEARCH CORPORATION OF THE UNIVERSITY OF HAWAII FOR FY07 FOR THE FOLLOWING PROJECTS: CORAL REEF INITIATIVE (CONTRACT NO. 49090), COASTAL STOCK ENHANCEMENT (CONTRACT NO. 49820), PUBLIC FISHING AREAS (CONTRACT NO. 50027), STREAM/ESTUARINE STUDIES (CONTRACT NO. 51059), MARINE POPULATION SURVEY (CONTRACT NO. 51058), ULUA TAGGING (CONTRACT NO. 52851), AND FINFISH BROODSTOCK AND LARVAE CULTURE (CONTRACT NO. 52994), AND HAWAII MARINE RECREATIONAL FISHING SURVEY (CONTRACT NO. 48518)

Submitted herewith for your consideration is a request to amend/extend eight (8) existing project Agreements between the Board of Land and Natural Resources and the Research Corporation of the University of Hawaii (RCUH). The Amendments will add funding and allow continuation of the projects from July 1, 2006 to June 30, 2007. The projects, described below, are for fisheries research activities that support the Division of Aquatic Resources' (DAR) mission in the management of our fishery resources. Funds for the projects are contained in the Operating Budget for FY 2006-07, though adjustments may be made by the 2006 Legislature and/or through administrative allocations.

The Agreements enable DAR to secure assistance from RCUH in implementing the projects. RCUH's assistance is required in order for the DAR to meet project goals and objectives in a timely way.

Coral Reef Initiative (Contract No. 49090)

The Coral Reef Initiative project continues activities mandated under the National Coral Reef Conservation Act and the National Marine Sanctuaries Act. Activities include assessment and integrated development/management of marine protected areas, including a comprehensive management framework; monitoring activities to assess coral reef health; design of a research plan for NWHI resources; development and implementation of research and monitoring activities in the NWHI, review and assessment of all research permits, and development of a multi-agency management plan for the NWHI Sanctuary as a part of the designation process; statewide coral reef monitoring, and development of an overarching coral reef strategy to link various ongoing initiatives. Project funding is \$213,615; \$165,914 in Federal funds from NOAA and \$47,701 from State General Fund (LNR 401).

Coastal Fisheries Stock Enhancement (Contract No. 49820)

Experimental stock enhancement releases and monitoring will be continued in this project to determine the stocking effects and new management rules on recreational fish landings and its role to rapid stock recovery, especially in areas where natural recruitment may not be occurring. Personnel will be involved in conducting stream mouth, estuary and ocean surveys, monitoring nursery habitat, improving methods/technology of remote hatchery culture with continued efforts to spawn striped mullet, tagging and releasing moi and mullet fingerlings; investigate the impact of the alien mullet, *Valamugil engeli*, on native stocks; track daily movements of mullet, goatfish, sharks, and papio in the Wailoa River estuary nursery area and conducting fishermen creel census in the Hilo area to monitor contribution of past mullet stock enhancement releases to the recreational mullet fishery in Wailoa River/Hilo Bay. Project appropriation is \$163,211; \$114,306 in Federal funds from the Sport Fish Restoration Program, \$38,102 from State General Fund (LNR 401), and \$10,803 from Sportfish Special Fund (LNR 805).

Statewide Public Fishing Areas (Contract No. 50027)

This project will continue its research on resource assessment surveys in streams and reservoirs, monitoring and eradication of alien species, examination of fish habitats/populations, tagging/releasing rainbow trout, and maintenance of the PFAs and Kauai freshwater field station and hatchery. Research on the project will be expanded with the establishment of a new PFA at the Wailua Reservoir, Kauai. Surveys at the Wailua Reservoir will be conducted: to assess fish habitat and game fish populations, to gather input from potential public/private user groups of the reservoir, and in partnership with Kapaa High School, to increase the rearing/stocking of bluegill and largemouth bass. In addition, research at the Kokee PFA will be expanded to identify suitable stream habitats for the rainbow trout. To mitigate the temporary loss of Puulua Reservoir as the main trout rearing and fishing area due to anticipated repairs to the reservoir dam, trout will be restocked in the streams and surveys will be conducted to assess trout populations and new fishing areas. Project funding is \$142,540: \$106,905 in Federal funds from the Sport Fish Restoration Program, \$24,832 from the State General Fund (LNR 401) and \$10,803 from the Sportfish Special Fund (LNR 805).

Stream/Estuarine Fisheries Studies (Contract No. 51059)

This project involves research on native stream species and adjoining estuarine habitats. Project activities include the following on-going work: conducting native freshwater studies, especially identifying streams with high propagule contribution; finishing the PABITRA survey manual for publication; focusing stream sampling on the lower elevation sections and stream mouths, using the DAR Point Quadrat method and adapt other methods where optimal visibility is not required; finalizing the GIS-correlated stream database, and preparing it for staff training; assessing/defining the links between stream and estuarine ecosystems and coastal recreational fish species; and defining the role of estuaries as nursery habitat for game fish species. The project will also investigate other potential estuarine nursery sites. Project appropriation is \$150,000. This includes Federal funds of \$112,500 from the U.S. Fish and Wildlife's Sport Fish Restoration Program and \$37,500 from State General Fund (LNR 401).

Marine Population Survey (Contract No. 51058)

This project conducts research to provide scientific bases for establishing fishing regulations to support DAR's fisheries management goals and objectives. Work includes determining population status of marine fish, various marine crustaceans and invertebrates, and seaweeds; identifying, obtaining, and compiling information and data needed to establish bases for determining seasonal closures, bag limits and other pertinent management measures needed for fisheries management; analyzing and modeling gear and harvest effects on various fisheries, conducting population assessments; determining catch-

per-unit of effort; evaluating the status of regulated previously unregulated fisheries; developing/maintaining pertinent layers in the State Geographical Information System; and participating in statewide informational meetings, and public hearings to present data for proposed rule changes and to receive/respond to public input. Project appropriation is \$88,000. This includes NOAA Federal funds of \$27,000 and \$61,000 from State General Fund (LNR 401).

Ulua Tagging (Contract No. 52851)

This statewide volunteer angler-based fish tagging project will continue to have volunteer anglers capture, tag and release all marine fish species known as ulua and papio. Data analysis will continue on the data collected thus far and be assessed by species to determine growth, movement and other parameters that can be applied toward management strategies for these species. Data also will be analyzed and processed to begin production of a stock assessment model for the omilu, *Caranx melampygus*, specifically for the island of Oahu. The ulua and papio species account for the biggest recreational fishery in the state. With increasing demand, the supply of these fishery stocks may become jeopardized thus the need to promote management of the fishery. Project appropriation is \$45,000 in Federal funds from the U.S. Fish and Wildlife's Sport Fish Restoration Program. Grant match will be derived from volunteer hours.

Finfish Broodstock and Larvae Culture (Contract No. 52994)

This project is part of DAR's sport fish restoration effort to improve existing stocks of depleted coastal fish stocks. The tagging and release of selected marine finfish (e.g. moi and striped grey mullet) along our coastal shoreline will help to re-establish these once depleted fish species. Equally important, the fisheries information gathered from this project will help to evaluate the health of nursery habitats to sustain these species, their seasonal recruitment and migration patterns, the mixing of existing wild with cultured tagged stocks, etc. The support of this project will also allow the continuing investigation into the spawning, larval rearing, grow out, and potential stock enhancement of other popular finfish species such as kumu and ulua. Project appropriation is \$45,000. This includes Federal funds of \$33,750 from the U.S. Fish and Wildlife's Sport Fish Restoration Program and \$11,250 from State General Fund (LNR 401).

Hawaii Marine Recreational Fishing Survey (Contract No. 48518)

The recreational fishing survey project will continue to collect and analyze survey data to determine effort of private and charter boats, as well as shoreline fishing modes. Direct intercept surveys with shoreline and recreational boat fishermen will be conducted statewide with the following data being collected: catch, effort, species, gear type methods, disposition of catches or releases, and interactions with protected species, including interactions between fishermen and sea turtles. The survey data is then processed and converted into baseline data to reflect the amount of fishing pressure exerted on the marine resources, i.e. the amount of resources being taken and the rate of removal of these same resources. This information can then be used in managing the resources. Project appropriation is \$465,505. This includes Federal funds of \$315,505 (\$143,005 from NMFS and \$172,500 from the Sport Fish Restoration Program) and \$150,000 from the State's Commercial Fisheries Special Fund, LNR 153.

Approval to amend/extend the Agreements has been requested from the Governor, through the Department of Budget and Finance for review and approval. Also, the amendments to the Project Agreements have been submitted to the Attorney General's Office for preliminary approval as to form.

RECOMMENDATION:

"That the Board authorize the Chairperson to negotiate and, subject to necessary approvals, amend/extend eight Project Agreements with the Research Corporation of the University of Hawaii for FY 07."

Respectfully submitted,

DAN POLHEMUS

Administrator

PROVED FOR SUBMITTAL:

PHTER T. YOUNG Chairperson